

Amendment of Claims

Please amend the claims as indicated in the following listing of claims. This listing of claims will replace all prior versions and listings of claims in the present application.

Listing of Claims

1. (Currently Amended) A computer system for performing grid computing with a plurality of computers connected through a network, the computer system comprising:

a center server for requesting the plurality of computers on the network to execute a job;

and

a process server, which is one of the plurality of computers, for executing the job in response to a request from the center server;

wherein the center server comprises:

a scheduler section which assigns the job to be executed to the process server and issues a job execution request; and

an agent section which manages information about the process server, receives the job execution request issued by the scheduler section, and sends the job execution request to the process server to which the requested job has been assigned, in a manner selected to accommodate an access type of the process server

wherein the system comprises a plurality of process servers, and each of the plurality of process servers is provided with a separate agent section.

2. (Canceled)

3. (Previously Presented) The computer system according to claim 1, wherein the agent section obtains information about the capacity and operating status of the process server corresponding to the agent section from the process server and manages the information, and the scheduler section assigns the job to the process server on the basis of the information managed by the agent section.

4. (Currently Amended) The computer system according to ~~claim 2~~claim 1, wherein the scheduler section issues at least two job execution requests assigned to different process servers, and at least one agent section sends a first job execution request received from the scheduler section to the corresponding process server in response to polling access from the corresponding process server, and at least one second agent section sends a second job execution request received from the scheduler section to the corresponding process server in a push type scheduling scheme at timing managed by the second agent section.

5. (Currently Amended) The computer system according to ~~claim 2~~claim 1, wherein at least some of the process servers are connected to the center server through a firewall; and
the agent sections corresponding to said process servers send the request received from the scheduler section to the process servers connected through the fire wall in response to polling accesses from the process servers.

6. (Currently Amended) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

- a processor; and
- a memory operably connected to the processor, and having encoded thereon instructions executable by the processor, comprising:
 - a scheduler section which assigns a job of the jobs to be executed to a computer constituting the grid computing system and requests the computer to execute the job; and
 - an agent section which manages information about the computer, receives the request for execution of the job by the scheduler section on behalf of the computer to which the job has been assigned, and provides a request for execution of the job to the computer, in a manner selected to accommodate an access type of the computer

wherein the system comprises a plurality of process servers, and each of the plurality of process servers is provided with a separate agent section.

7. (Previously Presented) The server according to claim 6, wherein the agent section is

provided for each of computers constituting the grid computing system and makes the request for execution of the job by using an individual communication scheme established between the agent section and a corresponding computer.

8. (Previously Presented) The server according to claim 7, wherein a separate agent section is provided for each of the computers, the scheduler section issues at least at least one job execution request to each of at least two different computers, and at least a first one of the agent sections provides a request for execution of the corresponding job to a first one of the computers constituting the system in response to polling accesses from the first one of the computers, and at least a second one of the agent sections provides a request for execution of the corresponding job to a second one of the computers in a push scheduling scheme at timing managed by the agent sections.

9. (Currently Amended) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

a processor; and

a memory operably connected to the processor, and having encoded thereon instructions executable by the processor, comprising;

an agent section which manages information about capacity and operating status of a computer constituting the grid computing system, relays communication with the computer, and performs transmission and reception according to an access type of the computer; and

a scheduler section which assigns, on the basis of the information managed by the agent section, a job of the jobs to be executed by the computer, and requests the computer to which the job has been assigned to execute the job through the agent section

wherein the system comprises a plurality of process servers, and each of the plurality of process servers is provided with a separate agent section.

10. (Previously Presented) The server according to claim 9, wherein separate agent sections are provided for each of computers constituting the grid computing system, and the scheduler

section requests execution of the job through the agent section corresponding to the computer to which the job has been assigned.

11. (Previously Presented) The server according to claim 9, wherein the scheduler section assigns the job on the basis of information about the capacity of the computer stored in the agent section and makes the request for execution of the job regardless of an access type of the computer to which the job has been assigned, and the agent section sends a request for execution of the job issued by the scheduler section to at least a first one of the computers in response to polling accesses from the computers, and sends a request for execution of the job issued by the scheduler section to at least a second one of the other computers in a push scheduling scheme at timing managed by the agent section.

12. (Currently Amended) A job execution control method using a process server computer to schedule jobs and request execution of the jobs in a grid computing system, comprising the steps of:

the computer assigning a job on the basis of capacity of a process server constituting the grid computing system, stored in a storage, and executing a job of the jobs, regardless of the access type of the process server;

the computer issuing a job execution request to the process server to which the job has been assigned; and

the computer holding temporarily the issued job execution request and an agent section of the computer sending the job execution request to the process server to which the job has been assigned, according to the access type of the process server

wherein the system comprises a plurality of process servers, and each of the plurality of process servers is provided with a separate agent section.

13. (Currently Amended) A computer program product, comprising a computer readable non-transitory storage medium having encoded thereon:

computer instructions for storing in recording means and managing information about a

process server which constitutes a grid computing system and executes a job;

computer instructions for assigning the job to be executed to the process server on the basis of information about the process server and issuing a job execution request; and

computer instructions for receiving the job execution request and sending a request to the process server to which the requested job has been assigned, in a manner selected to accommodate an access type of the process server

wherein the system comprises a plurality of process servers, and each of the plurality of process servers is provided with separate computer instructions for receiving the job execution request and sending a request to the process server to which the requested job has been assigned, in a manner selected to accommodate an access type of the process.

14. (Previously Presented) The computer program product according to claim 13, wherein the computer instructions for sending a request to the process server send the request regardless of an operating status of the process server.

15. (Previously Presented) The computer program product according to claim 13, wherein the computer instructions for sending the request to the process server cause the computer to send the request to at least a first one of a plurality of process servers in response to polling accesses from the process servers, and send the request to at least a second one of a plurality of process servers at timing managed by the computer.

16. (Previously Presented) The computer program product according to claim 13, wherein the computer instructions for sending the request to the process server cause the computer to send the request received from a scheduler section to the process server connected to the computer through a firewall in response to a polling access from the process server.